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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,056	02/03/2004	John Tadich	MLP 7226	1530
321	7590	05/07/2007		
SENNIGER POWERS ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102			EXAMINER PAINTER, BRANON C	
			ART UNIT 3609	PAPER NUMBER
			NOTIFICATION DATE 05/07/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspatents@senniger.com

Office Action Summary

Application No.

10/771,056

Applicant(s)

TADICH, JOHN

Examiner

Branon C. Painter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 04/27/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 04/27/04 was filed after the mailing date of the non-provisional application on 02/03/04. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The definition of "first side portions generally defining a front side and an opposite back side which face opposite directions substantially out of said plane, and having second side portions located between the first portions which generally define opposite lateral sides which face opposite directions substantially within said plane" is indefinite for a web member with circular cross-section, as circular objects have no definite sides.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

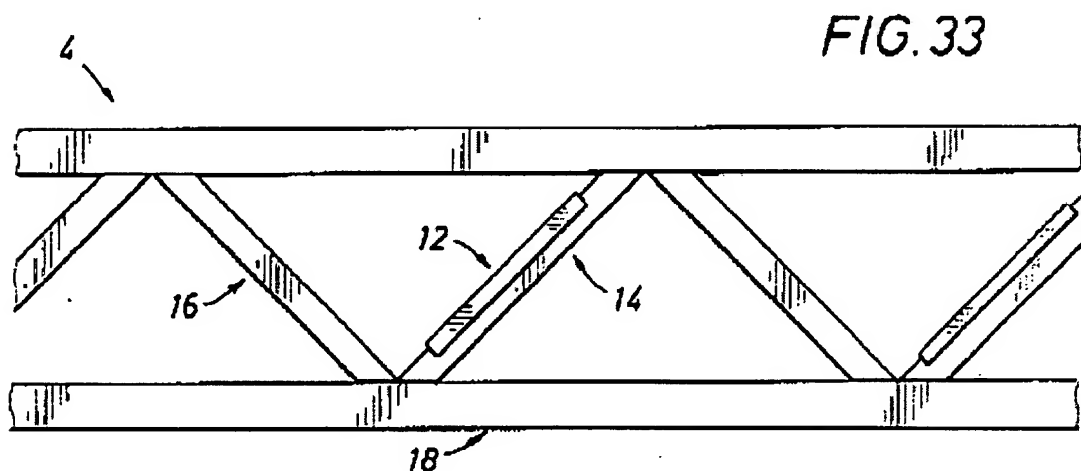
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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

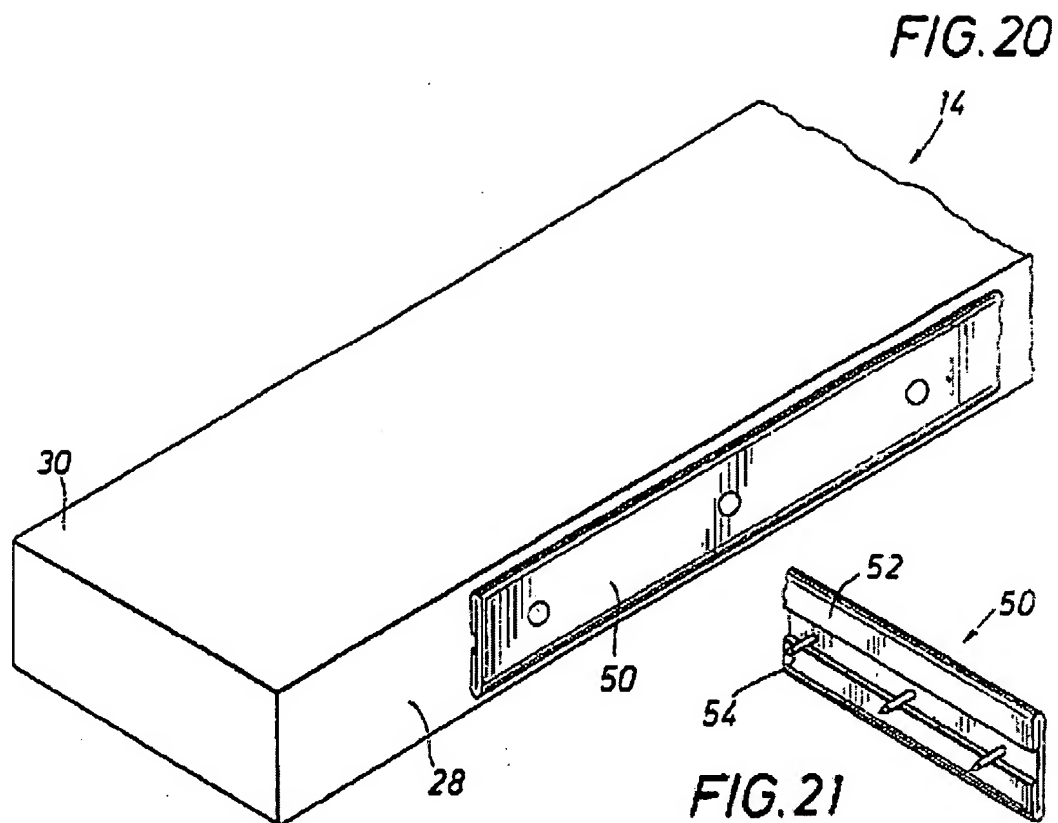
4. Claims 1 and 3-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Rolf (U.S. Patent No. 6,148,579).
5. Regarding claim 1, Rolf discloses a truss having all of applicant's claimed structure, including:

- a. "A structural truss comprising: a plurality of structural members...defining a plane..." ("floor truss" 4, Figure 33).



Reproduced from U.S. Patent No. 6,148,579

- b. "...a web including at least one web member extending between two structural members within said plane..." ("chords" 18 and "interior web member" 14, Figure 33).
- c. "...the web member having first side portions...within said plane;..." ("web member" 14, Figure 20).



Reproduced from U.S. Patent No. 6,148,579

- d. "...a brace secured to the web member..., the brace engaging the web member at one of said lateral sides;..." ("side brace" 50, Figure 20).
- e. "at least one fastener securing the brace to the web member, the fastener penetrating the web member at one of said lateral sides;..." ("nails or the like" 54, Figure 21).
- f. "wherein said front and back sides of the member remain free from fasteners" (Figure 20).

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6. Regarding claim 3, Rolf discloses rectangular web members ("web member" 14, Figure 20).
7. Regarding claim 4, Rolf discloses a brace with fastener holes ("side brace" 50, Figure 20).
8. Regarding claim 5, Rolf discloses non-integral fasteners ("nails or the like" 54, Figure 21).
9. Regarding claim 6, Rolf discloses a brace entirely within the thickness confines of the web member (Figure 20). The "side brace" (50) is clearly within the confines of the lateral side of "web member" (14).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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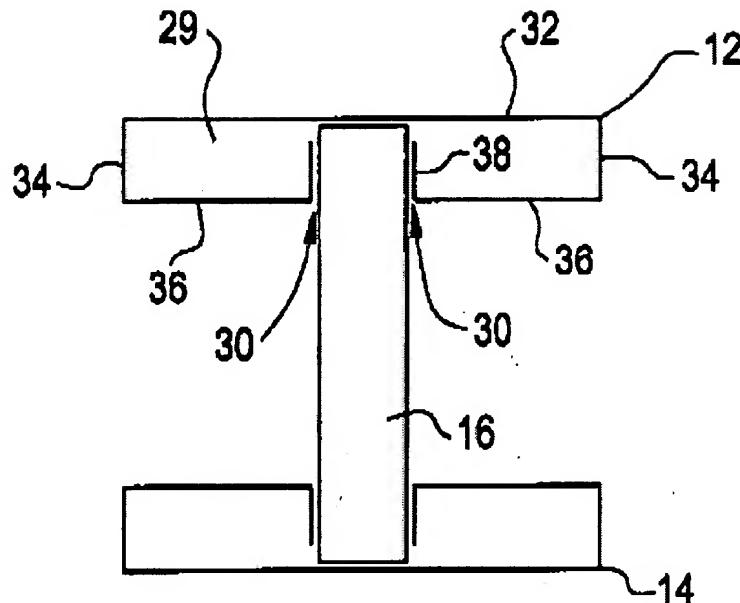
12. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rolf (U.S. Patent No. 6,148,579) in view of Quiring et al. (U.S. Patent No. 6,085,468).

- a. Rolf discloses a truss as set forth above.
- b. Rolf does not expressly disclose that the web member has a cross-sectional shape that is circular.
- c. Quiring et al. discloses a truss "comprising tubular upper and lower truss members separated by a continuous tubular web" (Abstract), wherein "the tubing may be of circular or rectilinear cross-section" (column 2, lines 55-56).
The use of a circular cross-section as taught by Quiring et al. is more economical than a rectangular cross-section.
- d. The examiner further notes motivation for combining the references as set forth in Quiring et al.: "the tubing may be of circular or rectilinear cross-section, however a circular cross-section is generally the most economical" (column 2, lines 55-57).
- e. Rolf and Quiring et al. are analogous art because they are both from the same field of endeavor of truss design.
- f. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use web members of circular cross-section in order to make the truss more economical.

13. Claim 7, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rolf (U.S. Patent No. 6,148,579) in view of Ehrenkrantz (U.S. Patent No. 6,161,361) and Melland (U.S. Patent No. 4,862,667).

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- a. Rolf discloses a truss as set forth above.
- b. Rolf does not expressly disclose that the brace has a generally flat base and a pair of opposite side walls extending from the base generally transverse to the base [claim 7], that the side walls have inwardly turned ends [claim 8], or that the said ends turn 180 degrees [claim 9].
- c. Ehrenkrantz discloses a metal reinforcing flange having a flat base ("outwardly facing portion" 32, Figure 4), a pair of opposite side walls extending from the base generally transverse to the base ("pair of opposed side portions depending from the outwardly facing portion" 34, Figure 4) [claim 7], inwardly turned ends ("a pair of inwardly facing portions depending from respective side portions" 36, Figure 4) [claim 8], and ends of the side walls which turn about 180 degrees ("support lip" 38, Figure 4) [claim 9]. The combined use of wood web members and metal braces such as those disclosed in Ehrenkrantz adds strength, as taught by Melland.

FIG. 4

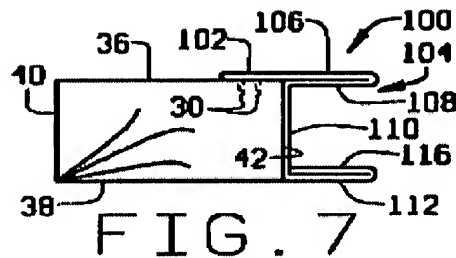
Reproduced from U.S. Patent No. 6,148,579

- d. The examiner further notes motivation for combining the references as set forth in Melland: "Wood is excellent when used in bending (compression) and steel is excellent when used in tension. The applicant's unique design combines both to achieve the strongest composite unit available based on load-to-span and also the most economical panel available" (column 8, lines 61-66).
- e. Rolf, Ehrenkrantz, and Melland are analogous art because they are all from the same field of endeavor of support structures.
- f. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the cross-section provided by Ehrenkrantz to construct a variation of the brace disclosed in Rolf. Furthermore, it would be

obvious to make these modifications in order to increase the strength and economy of the truss.

14. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rolf (U.S. Patent No. 6,148,579) as modified by Ehrenkrantz (U.S. Patent No. 6,161,361) and Melland (U.S. Patent No. 4,862,667), as applied to claims 7-9 above, and further in view of Pellock (U.S. Patent No. 5,946,879).

- a. Rolf, as modified by Ehrenkrantz and Melland, discloses a truss as set forth above.
- b. Rolf does not expressly disclose that the brace has a generally flat base and a pair of opposite side walls extending from the base generally transverse to the base, or that the side walls of said brace extend from the base and project outward from the web member.
- c. Pellock discloses a metal reinforcing brace having a flat base ("third section...forming the back of the 'C'" 110, Figure 7) and a pair of opposite side walls extending from the base generally transverse to the base ("second section...forming the top of the 'C'" 108 and "a fourth section...forming the bottom of the 'C'" 112, Figure 7). In addition the brace is shown projecting outwardly from the web member (Figure 7). While integral teeth are shown in the figures, it is disclosed that "alternatively, holes may be provided on the flange for mounting the base" (Abstract).



Reproduced from U.S. Patent No. 5,946,879

- d. Rolf as modified by Ehrenkrantz and Melland, and further in view of Pellock, discloses the claimed invention except that the fastening means are located on the front side instead of the lateral side. Rolf shows that fastening means on the lateral side of a brace are an equivalent structure known in the art. Therefore, because these two fastening means were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute front side fastening means for lateral side fastening means.
- e. The examiner further notes motivation for combining the references as set forth in Melland: "When the brace is attached to a web member, the web member better resists bending and flexing out of the plane, and thus a truss made with web members provided with the brace maintains its designed strength without the need for labor intensive, time consuming cross bracing or stiffening at the construction site" (column 1, lines 55-60).
- f. Rolf and Pellock are analogous art because they are both from the same field of endeavor of truss strengthening.

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- g. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to apply the cross-section provided by Pellock (Figure 7) to the bracing method disclosed in Rolf (Figure 20) by using non-integral fasteners instead of integral teeth, and attaching the brace to the lateral side of the web member instead of the front face.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Branon C. Painter whose telephone number is (571) 270-3110. The examiner can normally be reached on Mon-Fri 7:30AM-5:00PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Victor Batson can be reached on (571) 272-6987. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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Supervisory Patent Examiner
Art Unit 3609